

# PETRUS OIL COMPANY, L.P.

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12377 MERIT DRIVE, SUITE 1600 DALLAS, TEXAS 75251  
(214) 788-3300 FACSIMILE (214) 788-3399

May 25, 1988

Oil Conservation Division  
P. O. Box 2088  
Santa Fe, NM 87504-2088

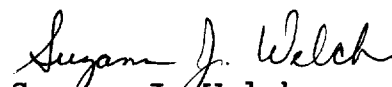
Re: State D #6  
Maljamar-Grayburg San Andres  
Lea County, New Mexico

Gentlemen:

Enclosed please find an original and one copy of our Application for Authorization to Inject (Form C-108) on the above captioned well. The required attachments have also been included in duplicate. Copies of the application were sent to the surface owner and offset leasehold operators on May 4, 1988. The date-stamped return receipt cards are attached for all except Yates Petroleum.

Please call me at 214/788-3368 if further information is needed.

Sincerely,

  
Suzann J. Welch  
Regulatory Coordinator

Enclosures

cc: District I - Hobbs

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Petrus Oil Company, L. P.  
Address: 12377 Merit Drive, Suite 1600 Dallas, Texas 75251  
Contact party: Suzann Welch Phone: 214/788-3368
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☐ yes ☒ no  
If yes, give the Division order number authorizing the project \_\_\_\_\_.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.) *on file*
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: Suzann Welch Title Regulatory Coordinator  
Signature: *Suzann Welch* Date: May 3, 1988
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footacre location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

# INJECTION WELL DATA SHEET

SIDE 1

Petrus Oil Company, L. P.  
OPERATOR

State D  
LEASE

660' FSL and 330' FEL of Section 11  
WELL NO. FOOTAGE LOCATION SECTION

17 S  
TOWNSHIP

33 E  
RANGE

## Schematic

K. B. ELEV. 4154  
D. F. ELEV. 4136  
GROUND LEVEL 4136  
CORR. \_\_\_\_\_  
SURFACE CSG. \_\_\_\_\_  
SIZE 8 5/8" WT. 22.0 DEPTH 1500'  
NO. SX CMT. PROD. 24 (Cemented)

ZONE NAME  
AND PROD. INTERVAL

OIL STRING

SIZE 5 1/2" WT. 17 DEPTH 4701'  
NO. SX CMT. 825 "

CEMENT BULK  
4445-08 4514-16  
4501 4574-82  
4519-17  
4536-42  
SOL. 4400-54  
4400-74 4456-54  
825 4459'

## Surface Casing

Size 8-5/8" Cemented with 800 SX.  
TOC surface feet determined by observation  
Hole size 12-1/4

## Intermediate Casing

Size " Cemented with SX.  
TOC feet determined by  
Hole size

## Long string

Size 5-1/2" Cemented with 825 SX.  
TOC 2100 feet determined by CBL  
Hole size 7-7/8  
Total depth 4700

## Injection interval

4482 feet to 4674 feet  
(perforated or open-hole, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with \_\_\_\_\_ (material) \_\_\_\_\_ set in a  
Baker Model AD-1 packer at 4380 feet  
 (brand and model)  
 (or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres and Grayburg

2. Name of Field or Pool (if applicable) Maljamar

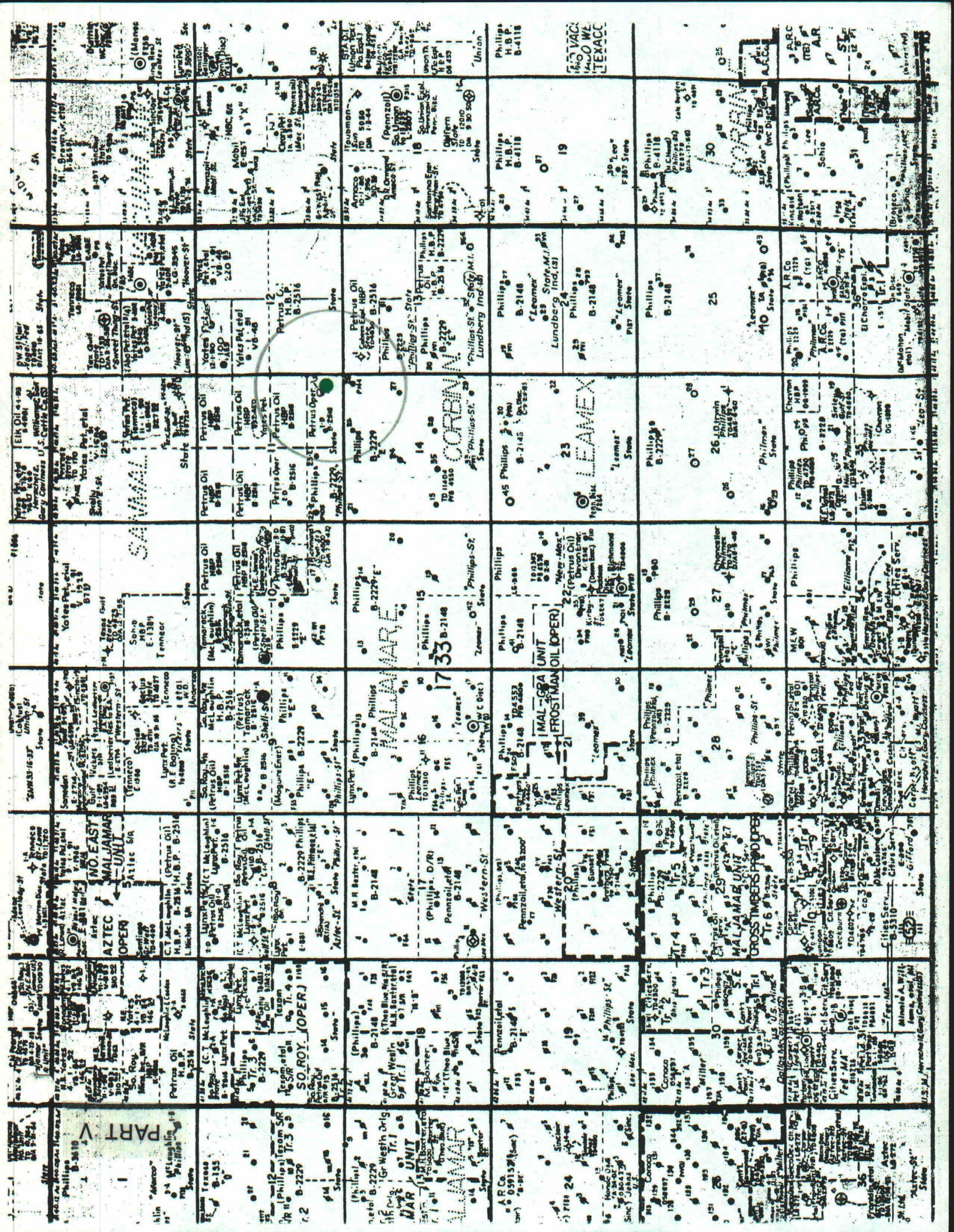
3. Is this a new well drilled for injection? ☐ Yes ☒ No

If no, for what purpose was the well originally drilled? Oil and gas production

4. Has the well ever been perforated in any other zone(s)? list all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Sannaal (Queen) at 3798'







## AREA OF REVIEW WELL SUMMARY

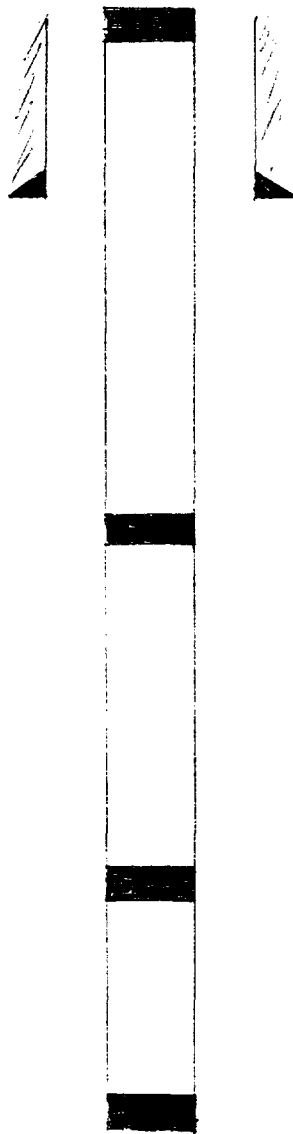
OPERATOR AND WELL DETAIL		SPUD DATE COMP. DATE	HOLE SIZE	CASING SIZE	CASING DEPTH	CEMENT SACKS	CEMENT TOP	REMARKS
-----		-----	----	-----	-----	-----	-----	-----
OPERATOR	PETRUS OIL CO., L.P.	02-25-78	12-1/4"	8-5/8"	415'	340	SURFACE	✓
LEASE	STATE "D"	04-14-78	7-7/8"	5-1/2"	4709'	1350	SURFACE	
NO. UT. S-T-R	1-0 11-17S-33E							
FOOTAGE	660 FNL & 1980 FEL							
TOTAL DEPTH	4715							
STATUS	OIL							
OPERATOR	PHILLIPS PET. CO.	02-14-76		8-5/8"	388'	400	SURFACE	
LEASE	PHILLIPS "E" STATE	03-09-76		4-1/2"	4618'	300	2825'	
NO. UT. S-T-R	23-N 11-17S-33E							
FOOTAGE	990 FSL & 2310 FWL							
TOTAL DEPTH	4618							✓
STATUS	OIL							
OPERATOR	PHILLIPS PET. CO.	09-23-76		8-5/8"	422'	400	SURFACE	
LEASE	PHILLIPS "E" STATE	11-27-76		4-1/2"	4648'	1350	SURFACE	CALCULATED
NO. UT. S-T-R	25-B 14-17S-33E							
FOOTAGE	330 FNL & 1980 FEL							
TOTAL DEPTH	4650							✓
STATUS	OIL							
OPERATOR	PHILLIPS PET. CO.	10-10-76		8-5/8"	422'	400	SURFACE	
LEASE	PHILLIPS "E" STATE	11-10-76		4-1/2"	4690'	1050	1200	CALCULATED
NO. UT. S-T-R	26-A 14-17S-33E							
FOOTAGE	330 FNL & 330 FEL							
TOTAL DEPTH	4690							✓
STATUS	OIL							
OPERATOR	PHILLIPS PET. CO	10-23-76		8-5/8"	422'	400	SURFACE	
LEASE	PHILLIPS "E" STATE	11-10-76		4-1/2"	4682'	1200	1000	CALCULATED
NO. UT. S-T-R	27-H 14-17S-33E							
FOOTAGE	1980 FNL & 660 FEL							
TOTAL DEPTH	4682							
STATUS	OIL							
OPERATOR	CABEEN EXPL. CORP.	12-04-59		8-5/8"	315'	150	SURFACE	
LEASE	STATE "D"	12-30-59						
NO. UT. S-T-R	1-D 13-17S-33E							
FOOTAGE	660 FNL & 663 FWL							
TOTAL DEPTH	4830							
STATUS	DRY (SEE ATTACHED SKETCH)							

## PLUGGED AND ABANDONED WELL

<u>OPERATOR</u>	<u>LEASE</u>	<u>WELL NO &amp; UNIT</u>	<u>FOOTAGE</u>	<u>S-T-R</u>
Cabeen Expl. Corp.	State "D"	1-D	660' FNL & 663' FWL	13-17S-33E

SPUD DATE: 12-04-59

P&amp;A DATE: 03-13-60

8-5/8" circ  
315'

10 sx surface plug

10 sx plug 1650-1616'

10 sx plug 2900-2866'

10 sx plug 4831-4793'

TD 4831'



PROPOSED OPERATION  
APPLICATION FOR INJECTION

PART VII

STATE "D" WELL NO. 6

1. Proposed average and maximum daily rate and volume of fluids to be injected 50-200 BWPD at 500 psi
2. The system will be closed
3. Proposed average and maximum injection pressure average 200 psi and maximum 500 psi
4. Sources and appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water N/A
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attached chemical analysis of the disposal zone. N/A

M E M O R A N D U M

DATE: May 4, 1988  
TO: Suzann Welch  
FROM: Stan Ward *SWW*  
RE: Oil Conservation Division Form - State "D" #6

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Saltwater will be injected into perforations 4482-4582, 4660-4674' in the Grayburg and San Andres formations. The Grayburg formation is composed primarily of sandstone with lesser amounts of dolomite. The San Andres formation is composed of dolomite.

In this area, native fresh waters are encountered in aquifers from 0' to 500' beneath the earth's surface. In the subject well, native fresh waters have been protected from wellbore fluids by 8-5/8" pipe set at 1506'. There are no sources of fresh water underlying the Grayburg and San Andres injection zones.

## PETRUS OIL COMPANY, L.P.

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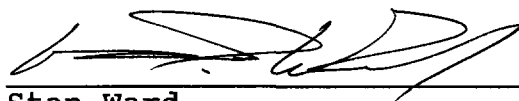
12377 MERIT DRIVE, SUITE 1600 DALLAS, TEXAS 75251  
(214) 788-3300 FACSIMILE (214) 788-3399

May 4, 1988

### APPLICATION FOR INJECTION

#### STATE "D" WELL NO. 6

I find no evidence of open faults or other hydrologic connection between the Grayburg/San Andres disposal zone from 4482-4582 and 4660-4684 and native fresh water aquifers in this wellbore.



Stan Ward  
Area Geologist

NOTICE OF APPLICATION  
HAS BEEN SENT  
TO THE FOLLOWING PARTIES  
ON MAY 4, 1988

SURFACE OWNER

State of New Mexico  
Commissioner of Public Lands  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

LEASEHOLD OPERATORS WITHIN ONE-HALF MILE

Phillips Petroleum Company  
4001 Penbrook Street  
Odessa, Texas 79762

Yates Petroleum Corporation  
1669 South Voss, Suite 355  
Houston, Texas 77057



# PETRUS OIL COMPANY, L.P.

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12377 MERIT DRIVE, SUITE 1600 DALLAS, TEXAS 75251  
(214) 788-3300 FACSIMILE (214) 788-3399

May 4, 1988

State of New Mexico  
Commissioner of Public Lands  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

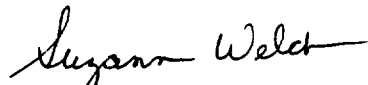
Re: State "D" #6  
Lea County, New Mexico

Gentlemen:

Enclosed please find a copy of Petrus' Application for Authorization to Inject (Form C-108) in the above captioned well. As the surface owner you must file any objections or requests for hearing within 15 days from the date of this letter.

Any questions for Petrus concerning this application, may be directed to me at the above address.

Sincerely,



Suzann Welch  
Regulatory Coordinator

# PETRUS OIL COMPANY, L.P.

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12377 MERIT DRIVE, SUITE 1600 DALLAS, TEXAS 75251  
(214) 788-3300 FACSIMILE (214) 788-3399

May 4, 1988

Phillips Petroleum Company  
4001 Penbrook Street  
Odessa, Texas 79762


Re: State "D" #6  
Lea County, New Mexico

Gentlemen:

Enclosed please find a copy of Petrus' Application for Authorization to Inject (Form C-108) in the above captioned well. As an offset operator you must file any objections or requests for hearing within 15 days from the date of this letter.

Any questions for Petrus concerning this application, may be directed to me at the above address.

Sincerely,

  
Suzann Welch  
Regulatory Coordinator

PS Form 3811, July 1983 447-845

DOMESTIC RETURN RECEIPT

**SENDER: Complete items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☒ Show to whom, date and address of delivery.  
2. ☐ Restricted Delivery.

3. Article Addressed to:  
Phillips Petroleum  
4001 Penbrook Street  
Odessa, TX 79762

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 551 696 651

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee  
X

6. Signature - Agent  
X *G. Salvan*

7. Date of Delivery

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, July 1983 447-845

DOMESTIC RETURN RECEIPT

**SENDER: Complete items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☒ Show to whom, date and address of delivery.  
2. ☐ Restricted Delivery.

3. Article Addressed to:  
State of New Mexico  
Comm. of Public Lands  
P. O. Box 1148  
Santa Fe, NM 87504-1148

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 551 697 611

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee  
X *Horacio Mascareñas*

6. Signature - Agent  
X

7. Date of Delivery

8. Addressee's Address (ONLY if requested and fee paid)

# PETRUS OIL COMPANY, L.P.

12377 MERIT DRIVE, SUITE 1000 DALLAS, TEXAS 75251  
(214) 788-3300 FACSIMILE (214) 788-3399

May 4, 1988

Yates Petroleum Corporation  
1669 South Voss, Suite 355  
Houston, Texas 77057

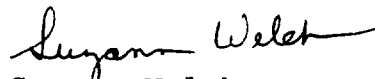
Re: State "D" #6  
Lea County, New Mexico

Gentlemen:

Enclosed please find a copy of Petrus' Application for Authorization to Inject (Form C-108) in the above captioned well. As an offset operator you must file any objections or requests for hearing within 15 days from the date of this letter.

Any questions for Petrus concerning this application, may be directed to me at the above address.

Sincerely,



Suzann Welch  
Regulatory Coordinator



PS Form 3811, July 1983 447-985

**SENDER: Complete items 1, 2, 3 and 4:**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☒ Show to whom date and address of delivery.

2. ☐ Restricted Delivery.

3. Article Addressed to:  
Yates Petroleum Corporation  
105 South 4th Street  
Artesia, NM 88210

4. Type of Service:  
☐ Registered ☐ Insured  
☒ Certified ☐ COD  
☐ Express Mail

Article Number:  
P 551 697 612

Always obtain signature of addressee or agent and **DATE DELIVERED**

5. Signature - Addressee:  
X

6. Signature - Agent:  
X

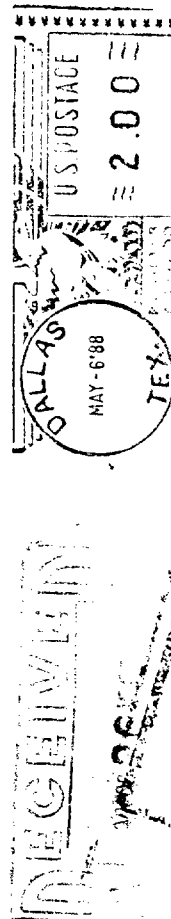
7. Date of Delivery:  
X

8. Addressee's Address (ONLY if requested and fee paid):  
X

DOMESTIC RETURN RECEIPT

Sent notice to wrong  
Yates Petroleum address.  
Re-sent to Yates on May 26<sup>th</sup>  
  
S.J. Welch

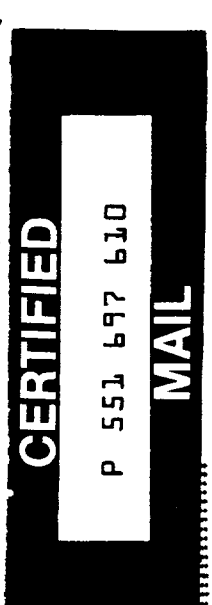
PETRUS OIL COMPANY, L.P.  
12377 MERIT DRIVE, SUITE 1600 DALLAS, TEXAS 75251



*[Handwritten signature]*

Yates Petroleum Corporation  
1669 South Voss, Suite 355  
Houston, Texas 77057

*[Handwritten signature]*



105 S. 4th  
105 S. 4th  
Artesia NM 88210

365387  
Date ☐ Hold  
1ST NOTICE  
2ND NOTICE  
RETURN  
Obtained from  
PS Form 3811-A,  
Oct. 1980

# Affidavit of Publication

PART XIII

STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF LEA )

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Director of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled  
Notice Of Application

and numbered ..... in the  
..... Court of Lea  
County, New Mexico, was published in a regular and  
entire issue of THE LOVINGTON DAILY LEADER and  
not in any supplement thereof, once each week on the  
same day of the week, for One (1)

consecutive weeks, beginning with the issue of .....  
May 11, 1988

and ending with the issue of .....  
May 11, 1988

And that the cost of publishing said notice is the  
sum of \$ 7.40

which sum has been (Paid) (Assessed) as Court Costs

Subscribed and sworn to before me this 42  
day of May, 1988

*Mr. Jean Serier*  
Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 1990

## LEGAL NOTICE NOTICE OF APPLICATION FOR OIL AND GAS DISPOSAL WELL PERMIT

Petrus Oil Company, L.P., 12377  
Merit Drive, Suite 1000, Dallas,  
Texas 75251, has applied to the Oil  
Conservation Division for a permit  
to dispose of produced saltwater by  
injection into the State "D" #6,  
located 660' FSL & 330' FFL of Sec-  
tion 11, T-12-S, R-33-E, Lea County,  
New Mexico. Saltwater will be in-  
jected into the San Andres formation  
at 4660-4674' and the Grayburg for-  
mation at 4482-4582' at maximum  
rates of 200 BWPD at 500 psi. The  
Petrus contact is Suzann Welch at  
214/788-3300. Interested parties must  
file objections or requests for hear-  
ing with the Oil Conservation Divi-  
sion, P.O. Box 2068, Santa Fe, New  
Mexico 87501 within 15 days of this  
notice.

Published in the Lovington Daily  
Leader May 11, 1988.